245

OPTIONS FOR TOMORROW

Our nation has been built on the premise of natural resource abundance and availability. Yet, our confidence in that premise has been deeply shaken by events in this decade.

We are approaching difficult choices about the future rate and direction of our progress, the manner by which it will be advanced, and the style and quality of our living.

Can we forget the gas lines of the summer of 1979? Our nation's proven reserves of oil have declined more than 25 percent since 1970; natural gas reserves by nearly 33 percent.

A generation ago, we sent more oil out of the country than we brought in. Now we import nearly half of the oil we use, at a cost we can ill afford, and in amounts we can scarcely justify as responsible energy consumers.

On other resource use fronts:

We are striving to develop a long-term balance between our burgeoning uses of water and the rate of ground water recharge. In the interim we face shortages of water for irrigation.

We are still losing over 4 billion tons of top soil annually, a loss of a precious resource that threatens the continued productivity of both agriculture and forestry.

Remarks of ~~M. Rupert Cutler~~, Assistant Secretary of Agriculture for Natural Resources and Environment, before the Timber Supply Issues and Options Conference arranged by the Forest Products Research Society, San Francisco, California, ~~October 3, 1979~~.

Our annual losses of prime farmland and productive wetlands through their conversion to other uses portend reduced agricultural efficiency and disappearance of habitat which is vitally important to our fisheries and wildlife resources.

And yesterday, at this meeting, we heard projections that our country's yearly demands for wood may outstrip supply by the year 2000--only 20 years from now--and that timber product prices are expected to rise substantially as supply and demand reach a balance in the marketplace.

Resource scarcity. Increased cost. At best, that's a dismal prognosis for a nation so accustomed to resource plenty. Americans have always had a faith--an intensity of purpose--that our children's life would be better than our own. We must keep that faith.

President Carter's energy proposals are directed at both resource scarcity and cost. He has called for an all-out drive to obtain alternative energy sources. He has proposed a bold program of energy conservation. He has pledged a continuing concern for environmental quality and natural resource conservation needs as we work our way out of this "energy crunch."

The President's goals to reduce scarcity and cost are the goals of all Americans. It is up to us--to you and me--to develop the way, the means, and the actions required to ensure a high quality of life for future Americans.

When we consider our timber resources, there can be a bright tomorrow if:

o we start now to make the necessary policy decisions and carry out the required actions;

o we consider wood as an important part of a total materials policy--as a renewable material which requires little energy for conversion and use, and which can thereby play a significant role in meeting our nation's material requirements more efficiently.

Yesterday, we heard:

o that 50 years from now, United States timber use will be more than double what it was in 1977;

o that substantially increased imports can meet only a small part of this increased demand;

o that the brunt of this demand will fall squarely upon our domestic forest resources--particularly the non-federal lands.

Where are we going to get the wood we need?

The theme of this conference emphasizes the most obvious option--the increased-supply option. Through higher standards of forest practice and intensive forest management, we can produce more timber. The potential is there. The net growth per acre on all forest lands is still only three-fifths of what can be attained in a fully stocked natural stand.

One possible way is to intensify forest land management. Preliminary results of a joint Forest Service-industry study show economic opportunities for intensifying the management of 160 million acres of commercial timber on non-federal lands--about a third of the nation's total. Pursuing of those opportunities could nearly double the net annual softwood timber growth in the United States.

As most of you are aware, these opportunities for intensified management are concentrated in the South and on farm and other non-industrial private forest lands.

Many of these southern lands already have been brought into timber production through the activities of state foresters, the forest industry and forestry consultants. However, on the vast majority of non-industrial private forest lands across the country, the problem is not bad management; it is simply the lack of management. The major need on these lands, if we are to sustain their contribution to the timber supply, is to assure they are managed to achieve optimum production that coincides with the owner's objectives for the land.

Forest Service data indicate one consequence from lack of management. They show the regeneration of softwoods is lagging significantly behind the harvest of existing stands on private nonindustrial forest land. As a result, this acreage is being taken over by less desirable vegetation at a rate of 700,000 acres a year and contributes to serious reductions in the future timber supply. Softwood reforestation is not taking place after the majority of harvest operations.

Can we develop more effective programs and policies to assure the management of these private forest lands? Surely production increases can be encouraged on the basis of multiple-objective plans, even on lands not owned primarily to produce timber.

We must develop better programs and clearer policy direction if we are to avoid a serious upward shift in timber prices and in the cost of housing and other products.

Some have suggested that National Forest timber harvests must rise substantially to solve our timber supply problems. We agree that there are oportunities for increasing timber production on the National Forests.

We can promptly reforest burned and harvested areas with genetically improved planting stock. We can further improve protection of valuable timber stands from fire, insects, and disease. We can adapt timber sales procedures and requirements to encourage the use of new technology, such as the proposed helistat equipment which, if successful, will make additional areas accessible for harvest. We can salvage much more dead and dying timber. We can dramatically increase fiber recovery at harvest. And we can consider departures from non-declining flow as part of National Forest land management planning.

When they are cost-effective, environmentally acceptable, and to the extent that personnel and money are available, we will take these and other actions to increase the timber supply from the National Forests.

Opportunities for increasing the volume of timber supplied from the National Forests are constrained by problems of access, and by the multiple purposes and diverse publics these lands serve.

Remember:

The Forest Service Organic Act of 1897 mentions the "purpose of securing favorable conditions of water flows," just before it states that the Act is "to furnish a continuous supply of timber."

The Weeks Act of 1911 authorized land acquisition for National Forests where "necessary to the regulation of the flow of navigable streams, or for the production of timber."

The Multiple Use-Sustained Yield Act of 1960 declared that "the National Forests are established and shall be administered for outdoor recreation, range, timber, watershed, and wildlife and fish purposes."

Through the National Forest Management Act and other laws, the Forest Service has been given specific legislative mandates for environmental protection. Wilderness, wild rivers, recreational trails, rare and endangered species, clean air and water, historic sites, and a host of other resource values must be protected.

There is no denying that our efforts to meet these environmental quality requirements and to provide non-timber values on the National Forests will limit the amount of timber which will be cut from these lands.

Concern has been expressed about the loss of commercial forest land in the National Forest system to non-timber uses and about the reduced harvest proposed on some areas to protect other values. I recognize that this concern is sincere and founded upon observation of what's happening in the real world.

We must give careful consideration to this concern. It may well be that some National Forest lands are especially suited for continuous, extensive timber management. Opportunities to make timber production the primary purpose of these lands will surface in the land use planning process. The merits of these opportunities should be fully considered.

However, by clearly insisting that the environment is to be protected, and that the National Forests are to provide wilderness, livestock forage, clean water, wildlife habitat, and recreational opportunity, the American people have rejected the doctrine that timber is the primary use of all the public forests.

Some have suggested that public support for environmental protection and other values would wilt when resources became scarce and expensive. But several recent polls indicate this hasn't happened. The American people strongly support environmental protection. They consider environmental problems to be serious.

Public preferences were reflected yesterday, when Max Peterson described the projections of the Resource Protection Act (RPA) Assessment. These indicate that most demands for non-timber resource values will double over the next 50 years.

Timber is only one of many important and coequal values that National Forests provide. We who administer these lands are caught in an intricate web of conflicting and complementary land use demands that present immense potential for conflict, for lost opportunity, for abusing the land, and for malfeasance as trustees of public resources.

The policy we have for dealing with these demands is multiple use land management. It is "the management of all the various renewable surface resources of the national forests, so that they are utilized in the combination that will best meet the needs of the American people." It is "making the most judicious use of the land, while allowing for periodic adjustments in use to conform to changing needs and conditions." It also means "harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output."

Some have thought that we might "have our trees and cut them too." Their idea was that setting aside wilderness would not reduce the timber harvesting potential if the money spent to build roads was used instead to increase the productivity of the remaining lands.

The Forest Service conducted the Roadless Area Tradeoff study to see if this would occur.

We found that the tradeoff would result in less total timber production because of environmental constraints and multiple use considerations. The study shows that, if we want to produce more timber from the National Forests beyond the modest increases possible through intensified management, we have two choices. First, we must either accept less of other resource values or, second, spend much more money and effort mitigating the effects of increased harvesting. There is no reason to believe that the American people are willing to do either.

Starting with the use of 2,4,5-T in the Vietnam War, there has been mounting public concern about the use of phenoxy herbicides on the National Forests. Now, that same type of concern is growing in regard to 2,4-D. It is important that the Forest Service deal with this issue in a responsible manner. Our actions must be on scientific facts and, as much as possible, meet the public demand for human and environmental protection as well as commodity production.

To accomplish this, I have asked the Forest Service this week to establish a research and implementation approach that will provide centralized expertise on the management of pest vegetation. This action will give the management of pest vegetation the same high level of technology development and program direction that we now have for insects and disease.

Together with our current units on insect and disease control, this newly centralized source of expertise on management of pest vegetation will comprise an essential component of a total integrated pest management program for forestry. The total program will offer an environmentally sound defense against insects, diseases, and pest vegetation.

Furthermore, we need to specifically address questions regarding the application of 2,4-D. Therefore, I have asked the Forest Service to adopt criteria for determining uses of this herbicide which will limit the application of 2,4-D to the most essential uses and provide human and environmental protection.

This action on the management of pest vegetation is an illustration of the way we can prudently give consideration to both timber and non-timber resource values and as a nation obtain increased production of timber. However, we are coming to realize that the supply option promises only a partial solution to the timber resource situation we face.

I suggest that we explore more fully the demand-side path to meeting future timber needs. This is not only a logical part of any materials policy, but also may be an option that is more efficient and less costly.

Some have suggested that the projected rise in consumer demand for wood products may never materialize because prices will be higher than expected, or because income won't rise at the expected rate.

Also, our perspective of the future must be well-laced with a healthy respect for how rapidly new technology, new laws, and changing lifestyles can alter trends. Given rising energy costs and interest rates, for example, isn't it possible that changing lifestyles and changing preferences for housing and other items could also dampen the demand for wood products? Thus, the demand for timber may be less than we anticipate.

We would be foolish, however, to base future policy on speculation that variations from demand estimates will remove concern about supply. We must consider opportunities for positive action that affect the demand for timber.

We must deliberately seek to hold down the rise in demand for the raw timber by meeting consumer demand more efficiently.

We can do this by increasing the recovery of wood fiber in high-value products, by improving the efficiency in using wood products for construction and other purposes, and by developing wood fiber recycling systems to reduce our reliance on new wood fiber.

We have the technology to do these things.

Structural flakeboard or COM-PLY can put virtually all of the wood from small logs into panel products. Conventional plywood recovery is only 50 percent.

Computerized sawmill control technology was unused just five years ago. It is now used in about 100 mills in the United States; it could provide a billion board feet each year from current harvest levels if used in 1,000 mills nationwide.

Use of the experimental truss-frame house design could save a billion board feet of lumber a year. The adoption of more efficient ways to renovate or maintain our existing structures could reduce the demands for raw timber.

We also have urban waste recycling systems that can salvage and reuse a significant share of the 67 million dry tons of wood and paper waste generated each year.

Processing systems being developed to use smaller pieces of lumber such as edgings and small logs to make wide-width and long lumber hold potential for increasing yields another billion board feet.

Papermaking techniques now under study to make stronger papers from the lower quality pulps also could increase the yield of forest products.

Those are examples of practical ways we can improve our wood utilization practices to meet consumer demand more efficiently.

There are other ways to dampen demand, of course. One approach, as with oil, involves rationing or other authoritarian measures. In our country we usually take all steps possible to avert the need for such extreme measures.

Other possibilities include increased imports and the increased use of wood substitutes. Serious consideration of either of these requires careful examination of the consequences which they may cause. We need to know, prior to their use, how these ways for dampening demand will affect energy requirements, the economy, our social structure, and the environment. I do not recommend these approaches now. In fact, prospects for importing more wood will become increasingly poor as tropical deforestation sharply decreases the overseas supply. Also, we know that wood consumes far less energy to produce than other building materials.

Research must play an important role in the future of timber supply and demand. Through application of research in the past, we have dramatically increased the productivity of the land and the utility of the wood it produces.

We must conduct the basic research which will fuel further advances in the production and utilization of wood.

We must focus research programs more closely to the needs ahead--to the nation's energy situation, to the more efficient recovery and use of wood fiber, to the improved quality and use of hardwood timber, and to a closer accommodation of land uses on a finite land area.

The Forest Service program on preventing fires in southern California is a good example of the way research can contribute to solving problems arising from diverse land uses.

One of the worst fire hazards in the nation exists where cities and towns encroach on forests, chaparral, and brushland. Because of the explosive nature of these fires, preventing them is a lot surer than trying to suppress them after they start.

Two efforts to prevent these fires are currently being pursued by the Forest Service. One is a major research effort on vegetation management, especially on chaparral. The other is the implementation of a program called FIRESCOPE. FIRESCOPE integrates the latest technology in communications, infrared fire mapping, and fire spread and data processing. It also is a coordinating mechanism for cooperating agencies during major emergencies.

Although FIRESCOPE is only partially implemented at this point, this system received high marks during the most recent fire situation in the arid brushland of southern California.

Other forestry practices must be extended and improved to apply the knowledge gained through research.

I already have pointed out the opportunities on the National Forests. On forest industry lands the need is to assure prompt regeneration of harvested lands with adequately stocked stands. And we must unlock the potential productivity of farm and other private forest lands.

Beyond this we need to rethink the purposes of governmental policy on resource management. We have not correctly formulated the nature of the problem. The reason resource shortages seem so difficult to tackle is that we look at them as problems of supply, rather than as problems of unmanaged use that has outpaced our resource base. Traditional policymaking has encouraged expansion of supply when faced with scarcity. It has ignored a possibly more efficient and less costly option which emphasizes demand management as well.

Today natural resources are becoming scarcer and more difficult and costly to extract. Now and in the future it may well be cheaper to conserve than to produce additional resources. We must restructure our policies to address these new realities.

We are not--nor should we be--prisoners of the past.

The methods we need to assure an adequate supply of timber resource for tomorrow are available to us and need only be carried out. We must use the options available to us--both supply and demand--to cope with increased scarcity and cost of timber. We must focus research, apply a higher standard of practice, and redirect our policies to accomplish what is needed.

# # # # #